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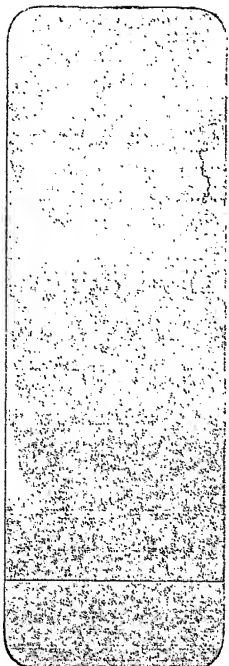
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<b>Office Action Summary</b>	<b>Application No.</b> 10/649,593	<b>Applicant(s)</b> VILLWOCK ET AL.	
	<b>Examiner</b> Jason Y Pahng	<b>Art Unit</b> 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 9 and 23 are objected to because of the following informalities: There appears to be a typographical error.

It appears that claim 9 should depend on claim 8 instead of claim 10.

It also appears that claim 23 should depend on claim 11 instead of claim 13.

Appropriate correction is required.

Claims 23 and 24 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The scope of the claims 23 and 24 are not clear. Claims 23 and 24 do not further limit the method of comminuting a polyurethane-containing material.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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With regard to claim 1 and 24, the phrase, "at least two steps" (line 7), is not clear. What do the two steps mean? All pulverization process have two steps, at least a step of beginning pulverizing and a step of ending pulverizing.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 10-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al. (US 5,669,559) in view of Prosser et al. (US 3,687,699).

With regard to claims 1, 10, 11, and 24, Wagner discloses substantially all of the claimed structure with the exception of adding hydrous silicate. In a closely related art, Prosser discloses a process for granulating tacky elastomeric material such as elastomeric polymers (column 2, lines 15-24) by adding a dusting agent such as talc or hydrous silicate (column 3, lines 5-15) in order to reduce agglomeration (column 1, lines 30-40). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Wagner with a dusting agent such as talc or hydrous silicate for pulverizing polyurethane, in order to reduce agglomeration, as taught by Prosser.

With regard to claims 2 and 25, Wagner discloses pulverizing a foamed material (column 5, lines 1 and 2).

Claims 3-5 and 26-28 recite adding hydrous silicate at various stages of the communiton process. Prosser discloses that dusting agent can be blown into the vicinity of the cutting action or otherwise caused to make contact with the tacky material, uniform distribution on the freshly cut surfaces of the tacky material particles being the objective (column 3, lines 22-26). It would have been an obvious matter of design choice to add hydrous silicate at various stages of the communiton process, since Applicant has not disclosed that the particular location of addition of the hydrous silicate solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the process of Prosser.

With regard to claims 6 and 29, Prosser's talc or hydrous silicate is less than 45 micron or 325 mesh size (column 3, lines 5-15).

With regard to claims 7 and 30, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use hydrous silicate with a size in the range of approximately 0.2 mm to 5 mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Furthermore, a size of 45 micron would work equally well as disclosed by Applicant in claims 6 and 29.

With regard to claims 12-14 and 31-33, Prosser's talc or hydrous silicate is added in the amount of approximately between 2 % and 10 % by weight (column 3, lines 16-17).

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With regard to claims 15 and 34, Wagner discloses a grinding step with two inputs (1 and 7) and an output (6), and a separation step (10) having an input and two outputs (13 and 14).

With regard to claims 16 and 35, Wagner discloses a conveying step (9 and 12). The use of conveying system is also disclosed in the specification (page 4) and is Applicant's Admitted Prior Art (AAPA).

With regard to claims 17 and 36, Wagner discloses a separating step (10) comprising at least one screen (column 3, line 13-15). The use of a screen is also disclosed in the specification (page 5) and is Applicant's Admitted Prior Art (AAPA).

Claims 18-22 and 37-41 do not add further limitations or any more additional steps to the parent claims. Claims 18-22 and 37-41 merely add motivations for adding hydrous silicates as claimed in the parent claims. Nonetheless, Prosser discloses that Prosser's talc or hydrous silicate prevents tacky materials from adherence to and pile up on the cutters and agglomeration upon storage (column 1, lines 34-40).

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al. (US 5,669,559) in view of Prosser et al. (US 3,687,699), further in view of Benn et al. (US 4,157,790). Claims 8 and 9 call for a solid additive chosen from a group including carbon black. In a closely related art, Benn discloses a process for pulverizing rubber with the use of a solid additive, carbon black (column 3, lines 19-22), in order to reduce agglomeration (column 1, lines 11-19). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Wagner (as

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modified by Prosser) with a dusting agent such as carbon black for pulverizing polyurethane, in order to reduce agglomeration, as taught by Benn.

Claims 23 and 42, as well as can be understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al. (US 5,669,559) in view of Prosser et al. (US 3,687,699), further in view of Triolo et al. (US 6,136,870). Claims 23 and 42 call for a solid additive or hydrous silicate containing polyurethane powder to be used to produce polyurethane-containing foam having approximately 0.01 to 10 % by weight of the solid additive hydrous silicate. In a closely related art, Triolo discloses producing a polyurethane-containing foam with additives such as silica and talc (column 8, lines 31-37) in order to improve softness (column 2, lines 61-64). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to use the powder provided by Wagner (as modified by Prosser) to produce a polyurethane-containing foam with additives such as hydrous silicate in order to improve softness, as taught by Triolo. Note that Triolo discloses using 10 % by weight of a mixture containing silica or talc.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Y Pahng whose telephone number is 571 272 4522. The examiner can normally be reached on 9:00 AM - 7:00 PM, Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571 272 4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JYP

  
DERRIS H. BANKS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3725



<b>Notice of References Cited</b>	Application/Control No. 10/649,593		Applicant(s)/Patent Under Reexamination VILLWOCK ET AL.	
	Examiner Jason Y Pahng		Art Unit 3725	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,669,559	09-1997	Wagner et al.	241/23
	B	US-4,650,126	03-1987	Feder et al.	241/22
	C	US-4,157,790	06-1979	Benn et al.	241/22
	D	US-3,687,699	08-1972	Prosser et al.	427/180
	E	US-3,648,937	03-1972	Ehrreich, John E.	241/15
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.